Welcome to the energy and innovation podcast. I'm your host Michael LaBelle. Here I interview innovative leaders creating a better energy system. We hear about the stories of how technology, innovation, society, and business come together to create the energy system we know the purpose of the energy innovation podcast is to bring these people forward so they can discuss your research or business ideas in a more public but still intimate forum where we can really learn from their experiences and efforts. You can contact me with feedback or suggestions by Twitter, at Mike energy or at my LinkedIn profile. Please follow us on iTunes or Stitcher so that you can automatically get updated with each new episode. If you liked this episode and feel others can benefit from it, please share it on social media. The purpose of today's podcast is to provide the context of a real story involving adjust energy transition. The EU is now putting a lot of money into its new Green Deal and other initiatives to support adjust energy transition. Today we are going to learn what this all means by speaking with Roxana Bukata, a Romanian journalist and a student at Central European University. She's done research on this topic in the context of the Jew Valley in Romania, both before she became a student and now while she is a student, now a little background on the issue Valley, the region has been in a in a transition which is frame it like that for the past 20 years since a few years after the fall of communism. So the whole system began to collapse. And and the deindustrialization of the region basically began. So it's always been in a state of transition even now. So it's been getting from so Place to somewhere but also changing and always seeking a better way of life for its people. A lot of people have left but still been dramatic changes there. The Jew Valley is the oldest coal region in Romania. It is one of the 18 coal regions in Europe that join the EU's just transition platform, this overseas alternative and sustainable projects for communities. What's interesting too, is that over 750 million euros are expected to be invested in the zoo Valley over the next seven years through the just transition mechanism. This is part of the US Green Deal. So it's a lot of money going into one region. So what we're going to talk about today and we have interviews with experts, it's kind of the background to this right so it's it's a huge amount of money. And let's we're going to talk about and find out what's been done in the past. A little background though, for the Green Deal. Now it's based on providing a roadmap of action to first boot The efficient use of resources through a circular economy and second to restore biodiversity and cut pollution. That's a very simplified way of explaining it. But all this is is an attempt for the EU to become Climate Neutral by 2050. How the EU is planning to do this is definitely a discussion for later and even definition of what is Climate Neutral. Now the main point is the zoo Valley represents an effort to provide assistance to region heavily affected by the decline of coal in the energy system. Now I'm going to turn to Roxana to help provide some of the background to the region. And then we're going to speak with two experts who were involved in transforming the region, but also protecting the cultural heritage of mining, protection and recognition of ways of life is important when we discuss just transitions. Now Roxanna, can you explain why you were first interested to explore the zoo Valley in the context of adjust transition? And also Can you give us some background about what happened? When the minds began to close down. Hi, Michael,
thank you for having me in this episode Jeeva is an emblematic coal region in Central and Eastern Europe with a history of over 150 years of coal mining. The second wave of industrialization in the communist times brought over 100,000 people from poorer parts of Romania to the valley. The industry was booming with 14 active coal mines and everybody had jobs. On the other hand, work conditions were precarious work accidents were numerous and environmental damage was extensive. Then the year 1997 came when the World Bank imposed on Romania a restructuring program, they decided that the coal industry was economically inefficient, so the mind started to close down. Today there are only four Active Minds and these will also close down soon. What was the problem was the mines were closed without alternatives. employment options for local people. And this led to social disaster like 90% of jobs were lost 40% of people left from job Valley. Professionally conversion programs were complete failures. But now things start to improve as we learn from Alexandra Mustafa campaign coordinator of banquet Romania, our first guest in today's episode, bank, which is an organization involved in the energy transition processes in Central and Eastern Europe. And Alexandra says there is great potential and active civil society NGO Valley and this is starting to show.

and it's over this bleak future that we can introduce some people who became involved in an attempt to improve the lives of people remaining in the zoo Valley. Can you describe for us about the role of bank watch and our guest Alexandria Mustafa?

Yes. So bank which put like put everyone at the same table and start at the bottom Up development. Like they say they became the interface between local community and the European Union. The European Commission was informed of the local initiatives here. And soon a direct communication and collaboration between Brussels NGO Valley started a banquet initiative, the six mayors of the valley signed the memorandum to collaborate for the sustainable development of your Valley. And they successfully received technical assistance from the Secretariat of the platform for call regions following a call for projects.

and how does the issue Valley compared to other regions then you which are also I would suspect there's less similar similarity, a lot of pressure to close the mind phasing out fossil fuels and the loss of jobs.
What I learned is that things are moving slowly. In Romania, there is no national Faisal clan, for coal and on local level 2018 was a missed opportunity, as Alexandra says other country are more advanced he gives the examples of Greece, which has a target to phase out called in 2028 and Slovakia, where consultations with the local community in upper new track called region were successful and people's opinions are taken into consideration within the development plan.

Michael LaBelle  7:19

But isn't it just more than local people trying to keep the coal going? This is certainly the case in China or India, where there's a lot of pressure to maintain jobs. How can the region become more sustainable and also create jobs that are essentially much cleaner?

Roxana Bucata  7:37

Well, banqueting. Greenpeace commissioned the report recently in order to evaluate what are the possible scenarios for sustainable development issue very, it's called just transition in hoonah dwara. And shows First of all, that coal is history, at least from an economical point of view. That just transition in hoonah data report shows that thousands jobs could be created by 2030 in other sectors like agriculture, tourism, industry and services and so on.

Michael LaBelle  8:09

Now you spoke to someone else in issue Valley the planet. Petrella Association may want to correct me on the name, but they're working hard to make the city really relevant again and doing some exciting things. Can you describe? What What are they doing?

Roxana Bucata  8:23

You said it correctly. Planet appetit association is one of the 14 active non governmental organizations that formed the zoo Valley involved platform architect Mihai tanjo, who is our guest as well today, an artist yon barbeau started the association with the aim of reclaiming the mining heritage for the community. The idea is that coal mining is part of the cultural identity of your Valley so their vision is to use the mining heritage, like former buildings, railroads, miners, neighborhoods, etc. for new projects in an effort to revert back vitalize the area yawn barbeau is a Romanian visual artist probably most famous for making over 10,000 caricatures of a former Romanian president young India school, he moved back to his hometown of Petra Angel Valley in 2000 and started to promote the area is a cultural periphery in response to the European cultural capital project. He started by restoring the yonder servo, a communist dissident Memorial house and moved on with a guerrilla type of cultural movement where he went around the city and wrote poems on the walls and drew graffiti on my buildings. He also organized the Batman festival and response to the public image of the minor is a violent individual and he built the first Contemporary Art Museum of Jubilee, namely Pompidou Center. His main purpose was to save the Petra mind, he invited cultural heritage specialists, Petra to help with the project. His aim
was to list the three landmines building As heritage so they couldn't be demolished. And this effort was beautifully documented in the planet epithelia documentary available on HBO.

Michael LaBelle  10:10

But it has this guerilla action paid off it sounds like by engaging and re occupying the space of the mind, that they are reinterpreting what the site means. It's not just a former complex with a coal mine, but actually becomes a cultural representation of a period of time. And I would even say like the embodiment of the miners themselves, game described in more detail what planet petrolia is doing.

Roxana Bucata  10:37

Well, Mihai Densha continues the work of young barbel by building partnerships and extending the project in multiple directions. In the last six years planet Attila people gained more and more access and space for cultural projects. At the moment there is a petition addressed to local administration to oppose the demolition of mining buildings and to protect the mining heritage. Well, a lot of people have mixed opinions about the cultural projects. And this doesn't surprise my Mihai at all. He says that it's normal and that what is beautiful for people is still to have well paid jobs.

Michael LaBelle  11:14

Sounds like the concept of adjust transition is catching on for this group of people. What are they doing to be part of the zoo Valley,

Roxana Bucata  11:21

as you were involved is part of the just transition discussions in the region. Hi, Daniel says that the 750 million euros for Romania from the EU just transition mechanism will come to Jew Valley because they already have a strategy in place. They have technical assistance. And you value is also part of the tracer program for former coal mining regions that already recognized the cultural regeneration as a good practice and they recommended to other regions

Michael LaBelle  11:52

in Europe. Now we turn to these two participants. First we asked Alexandria Masada about the financing and community financial support during this transition. Roxanna, I want to thank you very much for your work here and on the ground expectations coming out from some of the interviews discussed here. And really the research and your engagement with these people on the ground have really produced I think, an excellent podcast here, and a lot of material to help understand how things are changing both on the ground in Romania, but also how they symbolize and they act as kind of the story ground and this place to understand how the EU is investing money and what actually adjust transition means. So these
interviews really helped bring it out. So today, I want to introduce first our first interviewee, Alexandria Mustafa, who's joining us today, I just want to ask you this first question. Can you describe to us what you do at Bank watch and what you do in the region? How can you create change at Bank watch what is it that you do it Why Why are you personally involved in this looking at the core regions

Alexandru Mustata  13:04

backwards, Romania was set up in 2012. And I've been running the campaign on coal since 2016. You cannot be too ambitious in Central and Eastern Europe without proposing ambitious policies to face our cold overnight, we're just asking them to not to abide by the law really to get the permits they need and not to have such a negative impact on the people who are living in by the mind. So I work for a long while I was about this was about supporting the community were directly impacted by the mines about preventing the operation of power plants without permits and having incredible emissions like we are talking literally 20 times higher than the legal limits which happened, we have infringement in Romania still. And then Today we are realizing the this decline of coal and we said the we keep kept meeting with these people and of course they will not support the channel. transition from coal if there isn't, if it isn't just for them, as well, we started meeting with everybody in the regions, we started telling them about this concept, which really a concept of just transition is supported. And it was proposed by international trade unions. And we are meeting with trade unions in these mining regions. And you are like saying, Look at your colleagues propose you think this is important. And of course, it was about a lot about overcoming some really, really entrenched positions about their perspective on our work. And I think the key here was honesty. We were like, We still have these goals for the environment. We still believe that cold should be phased out all over Europe by 2030, not overnight. However, we are looking forward to working with you in order to identify the solutions, which are best for regions because we think that a key component of just transition is to have the public policies for design at the crest roots, it doesn't make any difference if the policies are designed by a government in the capital of or if they are designed by an NGO coming from the Capitol as well. So we're trying to get the people on the grassroots and this we start with the trade unions, of course, because this is their concept after all, but then we involve local civil society, municipalities, people who are in involved in education, because this would be a key aspect as well, when it comes to the scaling of the workers. And what we are proposing where we come in, and this whole process is we're trying to bring everybody to the same table. So they negotiate this process, and they don't forget about the reasoning behind that, which is to reduce the impact on climate as well.

Michael LaBelle  15:43

How much are they scared about job losses and how do you sell you know, alternative jobs to them, because these are quite high paying jobs?

Alexandru Mustata  15:52
Well, they aren't they aren't. Some of them are historically it's true, especially in hardcore in London. Background mining. But when it comes to lignite mining, these are open customi. These mines which are spread over hundreds or thousands of Hector's even, and a lot of the people working there, they're not skilled. They just because of course, there's the operators of the excavators, but there's a lot of stuff around them who are doing a lot of physical work, which isn't as well paid, unfortunately. To a certain extent, I think, sure, it is our job to sell these new jobs. But I think then again, this has happened in many places. And we've seen again, given our area of focus in Central and Eastern Europe. After the fall of the iron curtain, you had these transitions, which weren't just in a lot of countries. If you're looking at the vicious countries that Romania, Bulgaria at the Baltics, you will see that there are a lot of people laid off already and a lot of coal regions because there is no need. For this very energy intensive industry anymore, it doesn't make sense the economy could grow. And that eat there is this decoupling in almost all EU member states between the energy consumption and growth of the GDP. So historically, the GDP was growing together with the energy consumption. This hasn't been happening for the past 1015 years, all over Europe. And some of the jobs are lost. Of course, some of the jobs I think are promising. There's some risks they perceive, for example, these jobs are historically very well unionized. And if you look at the renewable sector, it's a doesn't have a good percentage of union members of unionized workers. And they think our job is to explain that, given that, to a certain extent, this is happening because again, forgetting about the climate economically call is pushed to the outskirts of the energy systems. Because the price of clean energy is becoming better and better and we still need a Of course, to have all these commitments on climate, we need to take very concrete action. And in this context, I think it's much better to look towards the future and to plan it. Because, of course, it's not easy to sell today a job which even if it provides a comparable income, it still requires a lot of effort when it comes to adaptation when it comes to rescaling. But if you're looking on the long term, if you're looking at a plan, called phase out, like Hungary has, which is amazing for 2030, right? Or then you have for Greece for 2028. And many other countries like Romania, Bulgaria, Poland, you don't have any data in mind. And I think that's how you, you can get the workers on their side if you're focusing on their needs first, and if you're trying to understand that this is not an overnight process, and that their needs should be at the center of this.

Michael LaBelle  18:55

And one of the examples from Romania is a issue that And you've done a lot of work there with community engagement. Can you describe that?

Alexandru Mustata  19:06

Sure Valley is a hardcore geek. They have the underground mind. They have the well paid jobs. They have a lot of early retirement because of the risks that are and very tangible impact on health that underground mining implies. So what we did there is that the region was included in the, in an initiative of the European Commission called the platform for coal regions in transition. But not much was happening. We didn't know why the process wasn't really transparent. And we started meeting with everybody is really just like the one year before and the lignite region and we were disappointed to see that only the mayor’s knew about it nothing. The trade unions did know anything about it. Not all
political parties knew about civil society as well. It’s quite varied. But again, they weren’t informed about this, because just perceived really, as a political process. And we felt that this approach was wrong. There wasn’t much progress going on throughout 2017. I mean, the plan surely wasn’t included in the platform. At the platform meetings in Brussels, it was represented by the central government, there is nobody from shoe Valley coming from Brussels, and we were signaling this to the European Commission. We are saying that, you know, there’s a lot of potential NGO Valley, but we are not seeing the sort of involvement of the people there. There’s because we were fascinated to learn about how active civil society is central valley, how many good initiatives are there? I think that the most important thing that they all understood is that in order to have some meaningful investments for the whole region, they need to collaborate and what we then work with them and with the European Commission, as well. to draft a memorandum of understanding between the six layers of Jubilee towns, in order that so they can implement concrete projects.

Michael LaBelle 21:09

So this was in the summer of 2019. And then so now, has there been any movement since then, or they still trying to figure out how to spend money or get the funds to build certain projects together joint projects.

Alexandru Mustata 21:22

So quite immediately, a good opportunity popped up coming from the platform. The platform was well, and Minister of the European Commission, as I mentioned,

Mihai Danciu 21:33

and

Alexandru Mustata 21:34

it explored different ways to grow. So what they did, they hired the team in order to run the Secretariat of the platform. And the Secretariat then put out a call during the same summer when they signed a memorandum a few months ago, they put out a call for technical assistance. So the European Commission’s wanted to select a few regions which would receive technical assistance in order to exactly what you’re saying to identify projects for the regions and identify strategy that may be supplied together on the base of the memorandum and they were successful. And this year, they will be receiving until August technical assistance from the European Commission in order to identify products which could be beneficial for the region in an integrated manner again, not to be some isolated bits, but rather to be something which comes together and creates maybe an identity of the transition of Joe Valley. And then so the commission will support them to do this the into identify the project in a really participative manner. So with including stakeholders in the communities, which are, some of them are,
you know, informed leaders. I think even those even people who aren't really working for somebody, they should be involved as well.

Michael LaBelle 22:54

So your approach is more bottom up is what you're talking about bringing bring the different parties together facilitating the dialogue and having them assist in developing a program for the future.

Alexandru Mustata 23:06

We don't think it's possible to have just transition if it's not designed from the grassroots efforts outside bottom up, as you said. Really, I mean, there is no one shoe fits all there is. It's unrealistic to think that just by looking at economic data, without understanding what people need, you will find solutions for them. And I think the fact that Romania has such high emigration is battery relevant here because it's, if there are jobs which are created, then they're not what people are looking for. They will not take what for them would be a pay cut, really, because if they emigrate, they would make twice as much money maybe, of course in bad conditions and doing a very hard work. But if it's not something that they want to do, they will not stick around. And I think that one thing which must not be forgotten is that it's really important as well, that the workers and the communities are paid fair wages, nobody will stay for a minimum wage a thing and somebody who's been working in the mine, as it is the case for Joe Valley, somebody who is specialized in a field, if you give them 10 cents each, twice smaller that of course, they're not going to be excited about it. Of course, they won't want to stay. Of course, they won't support the closure of mines. So it's important to have this in mind. On the one hand, you need to involve the people because you need to see what really works for them. But then you also need to bear in mind the importance of paying living wages, wages, which are ensuring that they will have a decent life, the staying is usually because otherwise they would be okay. I think

Michael LaBelle 24:51

Roxanne has a question.

Roxana Bucata 24:53

Yes, Alexandra. I wanted to ask you about the report that bank watch released recently. Beyond coal, it lays out a few scenarios for you Valley, can you give us an example or two about the scenarios?

Alexandru Mustata 25:10

So what we did what we didn't do directly, because we're not economists, but we commissioned some economists to do for us an input output modeling, an input output modeling, again, in layman's terms, because I'm not an expert either looks at the economic results of the local economy of each sector,
really. And we have the data for the last 10 years of all businesses from Zoo Valley Be it SMEs, big corporations speed, the energy complex. So we took the data from all of them. And what the modeling does, of course, it’s looking at a lot of data it’s looking at using assumptions which are accepted in the words of economics. And based on this, it calculates if you’re investing One hero, and whatever business, how much of a contribution to the local GDP can you expect in the next year? What will be the necessary investment in order to grow this industry and how many jobs will be created? So we commissioned, some economists do this modeling for us. And we learn something which we were sort of expecting that if you keep pumping money in cold, you’re never gonna see that money back. You’re not gonna create any new jobs. But I mean, this, this isn’t hard to understand really, just as an example, the production costs the $20 energy complex today is 110 euro per megawatt. Meanwhile, the electricity sold by half that on average on the market. So for them, they have some form of something we think that state aid they don’t agree state aid, but they have basically guaranteed access to access to the grid. So that’s how they are able to to sell their electricity, which is very expensive, of course. And then the modeling also looked at other businesses. And there’s a lot of potential really tourism because I mentioned that third year. It’s not the solution, but it’s part of the solution. sustainable tourism can be increased because you don’t want to replace one problem with another. So you don’t want to have instead of emissions from the coal mine from the coal power plants to have emissions from planes flying over to Valley and people find that it’s about sustainable emissions, this small scale rural tourism and tourism in the mountains as well with respect to the biodiversity as possible there. And that will support the creation of some new jobs that all the jobs can be translated into tourism jobs, but to a certain extent, he can provide solution. They can also do sustainable agriculture there in the in the shape of small family farms, which are paired to Together with subventions from the Common Agricultural Policy of the European Union, they can be as well they get investment can be covered really easily because of the subtraction. So these are some type of business which can be developed there.

Michael LaBelle  28:15

My final question is really looking at from drawing from your experience here. They're in Romania, and the Jiva Zoo Valley. But then the European Union is coming out with this just transition mechanism. And it’s all about having a just transition. How do you how do you square with what the EU is expecting to do? I mean, it’s 100 billion euros is a huge amount of money that that's going to be somehow right being used to foster more economic development and changing the economies in certain regions. Howdy, how do you see this top down kind of movement with cash compared to your bottom up experience of what working with community members

Alexandru Mustata  29:00

Right. So maybe I have three points. And I hope not to forget them all. But first one would be that there is 1000 billion, but that’s for the entire economy, not only for coal for coal regions, we have confirmed right now, through the proposal for just transition and 7.5 billion. And through the initially proposed allocation mechanism, you have 750 million for Romania. It's not that much over seven years. It's not that huge, and they think you can spend it in a meaningful way. The projects that you can finance here, yes about what you’re asking about the comparison about this huge amount of mining coming from the
top versus the bottom up approach. Fortunately, the Commission has been listening to us to a certain extent, and the commission is conditioning the access the fund to the destination and to the 750 million for Romania. It is condition by developing regional plan for the transition until 2030. So you need to have milestones identified and goals up to 2030. And this needs to be done at that straly level, which is great. Not three, it’s the the different ways to define regions in the European Union. So not zero is the level of country. Number two, for example, is the level of development regions. That's how you have the allocation for the development, money and the Cohesion Policy. So just to compare the scale for example, Romania has I think seven or eight development regions Hungary has about four, probably four or five and then that's three level it's even lower than that. So for example, the strategy which needs to be designed for Jubilee in order to access this money needs to be done at the level of specific of the county. So then I think that to a certain extent, you can see This there is something in the regulation as well about doing these plants in a participative manner, it can be improved. And we are hoping that our members of the European Parliament will propose amendments to it. So it’s more focused on participation in this in these plans. And another important thing and essentially we haven't spoken too much about today is the angle of climate. These plans need to be coherent with the National Energy and Climate plans, which countries are finalizing this year. And that needs to be coherent with the 2050 targets of the European Union of climate neutrality. Again, there's not a lot of there's not strong language there in the proposal. There is not a lot of clarity of what this means. But we will be supporting our MEPs and the European Council as well to propose amendments to the regulations so that these plans are meaningful and that transition of the money is done in a way that really makes sense for the people. They think These features.

Michael LaBelle  32:01

All right. Well, I just want to say thank you very much, Alexandria for joining us.

Roxana Bucata  32:07

For the second part of our episode, we move right in the middle of Joe Valley Community and we talked to me Hi Daniel, architect and president of planet capital Association. Mihai in Romanian artists yawn barbeau. Started planeta Petrella, to show that the future of the valley lies in the power of people and the cultural regeneration of the area. They reclaim the mining heritage and are building a new era for the young people of jewel Valley. Young barbeau started reclaiming the buildings back when the mining activity was still happening at Petrella, the oldest mine in juvie. He put together small parts of the mining site and built Pompidou first Contemporary Art Center NGO value. This is how the Temple of the planet of Petra project started. Since then, they occupied another building and another building.

Unknown Speaker  33:06

Could you describe what the history not the whole history, but just a very, very brief history about maybe the industrialization of the Jiu Valley?
Okay, so well before the middle of the 19th century, the Jiu Valley was a pastoral land with only a few a few peasants with their, their cattle and their ships etc. And after they found the coal, the Hungarians saw that it was a very good opportunity for them to use it as a to stain the locomotive to use it as a full fuel for locomotives and also in the iron industry. And until the end of the 19th century, they introduced they started the mines the ground and the underground mines in the in the valley. Also the railroads there. So it was a first wave of industrialization, the Hungarian one. Afterwards, in the communist period, we had the second wave of forced industrialization, which brought over 100,000 workers and inhabitants in the valley, summing up with 1997, when we had almost 170,000 inhabitants. Now on the list under registry, we have about 130,000 inhabitants. But as we saw in the field, there are about 100,000. So what proportion of 40% left to left and valley in about 20 years? That's, that's the very short history of industrialization in the industrialization in the valley.

So with this huge exodus of people from the valley, but yet, kind of embracing this cultural heritage at the same time Who How is the relationship developing between the people that are staying there because they must be steeped and just tied to these locations since they're not moving? And how are they more passionate about preserving this cultural heritage then around mining?

We understand it as heritage with potential potential which is not custom to other places, which is specific to the valley and is the main heritage upon which we can work and transform it into something that can can help the valley go on.

Some of the opinions among the members of the community towards this culture is the future of your Valley scenario and yon barbeau himself. I know from what I read, there are some mixed opinions about this project.

What do you think? Hmm, yes, there are mixed opinions and it's so It's natural to be mixed opinions the way or the type of art of his art is something that is very avant garde for the for the area even though it's an it's a reactive type of art, the cultural activity in itself is not a target but is maybe only an instrument of self understanding no for the for the entire community. And it's also an instrument you know, to mediate between the contemporary types of activities or our artistic activities and science psychology of the psychology of the community now, and yeah, at the beginning, I also saw some some negative
reactions you know, what is that you only have you play is there some children's drawings on the walls? Why do you need them this is not art. Art is only something beautiful between Seeing the classics and that's that's it, but his way of doing is an instrument you know to to tackle the community to tackle what the community understands as being culture and art in itself. And also what what is important for us because for us as a as a community no the the usual cultural activities are someone comes okay presents a song a theater play, or I know an exhibition of some paintings, everyone applauds and says, This is beautiful. This is art without any critique without any debate regarding it. The type of art which emerges from barble is an art which contradicts it's an art with which tries to I don't know, maybe let you discover yourself. And this is very difficult. As As a conclusion for this for this question. I don't see the the culture as being or the community Is the culture as being something which is essential, we see it as as essential to start to tell the story of a new post industrial identity. And we see it like this. But we presented an enveloped in another image, you know, an image of maybe new types of industrial activities that can come in here may be new types of technology technologies that can come in here. We have a story we think it's a success story of the robotics club. High school students robotics hub in Petra light was the first in the valley. And you know, there are some students which are not the they don't have get a tan every every time in their school. They didn't have any passion to go to the school, but they found a passion in robotics. And they were a little bit neglected by their high school or not by the community. But their parents loved that they want to they are involved in something that brings them pride and joy. That's why they invested in the in those youngsters and those their parents are also former miners. Yes. And now we told them, okay, guys come here at the mind, we will organize events together. And we had the first event last year it was called robotics Valley. And we asked them, What is your vision for the valley and they said, I want to make a valley where everyone, we don't have miners who work in industry with their bare hands. But we have robots who can work in an industry and we shall benefit from that. From those activities. We don't have to work with our hands. We must be robots who work with their you know, work to be able to bring us well being and we said whoa, visionary guys, yeah, visionary high school students. And we organize these events at the mind as robotics Valley events at the at the mind and we also brought their parents at the mind back and the months ago, they said what is happening there at the mind that some I know, some types of activities that we don't think that are useful. And now they came and said, well, very good that you found the place where our children can develop their passion. And now, this is a type of activity or strategy with which is, you know, to to bring the people to the mind, we saw that the culture is not for everyone, we try to find that, that something in the middle which can bring everyone at the mind,